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Evaluation Board for Single High Speed Selectable Gain Differential Amplifiers (16-Lead, 3 mm × 3 mm LFCSP)

FEATURES

Enables quick breadboarding/prototyping
Selectable gain of 1, 2, or 3
Edge-mounted SMA connector provisions
Easy connection to test equipment and other circuits

GENERAL DESCRIPTION

The EB-D16CP33SG-1Z is designed, to aid in the evaluation of single high speed, selectable gain differential amplifiers. It has the flexibility to choose between the gain of 1, 2, or 3. The EB-D16CP33SG-1Z is a bare board (that is, there are no components soldered to the board) that enables users to quickly prototype a variety of differential amplifier circuits, which minimizes risk and reduces time to market. The EB-D16CP33SG-1Z evaluation board supports any of Analog Devices, Inc., single high speed differential amplifiers in 3 mm × 3 mm lead frame chip scale packages (LFCSP).

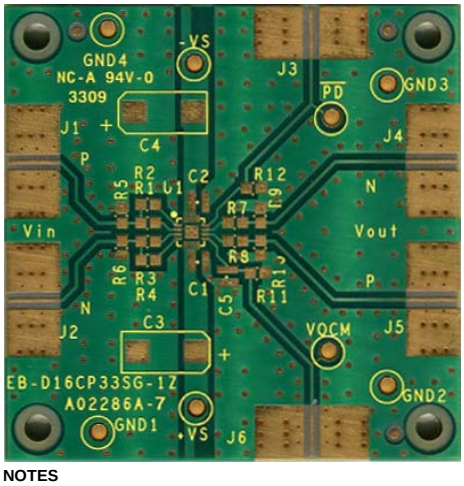
Figure 1 and Figure 2 show the component side and circuit side of the evaluation board. Figure 3 shows the evaluation board schematic.

The 4-layer evaluation board accepts edge-mounted SMA connectors on both inputs and outputs, which allows efficient and quick connection to test equipment or other circuitry.

The board ground plane, component placement, and power supply bypassing have been optimized for maximum circuit flexibility and performance. The evaluation board uses a variety of SMT component case sizes: 0508, 0603, and 7343.

Figure 4 and Figure 6 show the evaluation board assembly drawings. The metal layout pattern for connecting the board to the op amp and to the supporting circuitry is shown in Figure 5 and Figure 7.

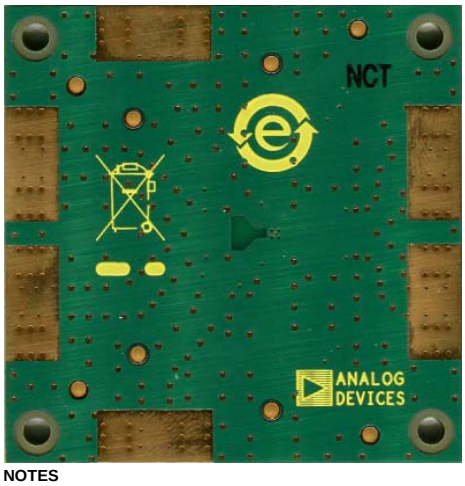
DIGITAL PICTURES OF THE EVALUATION BOARD



NOTES
1. THE EVALUATION BOARD SILKSCREEN PART NUMBER LABELING ON YOUR BOARD MAY BE DIFFERENT FROM WHAT IS SHOWN HERE.

08886-001

Figure 1. Component Side of PCB



NOTES
1. THE EVALUATION BOARD SILKSCREEN PART NUMBER LABELING ON YOUR BOARD MAY BE DIFFERENT FROM WHAT IS SHOWN HERE.

08886-007

Figure 2. Circuit Side of PCB

PLEASE SEE THE LAST PAGE FOR AN IMPORTANT WARNING AND LEGAL TERMS AND CONDITIONS.

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REVISION HISTORY

4/10—Revision 0: Initial Version

EVALUATION BOARD SCHEMATIC

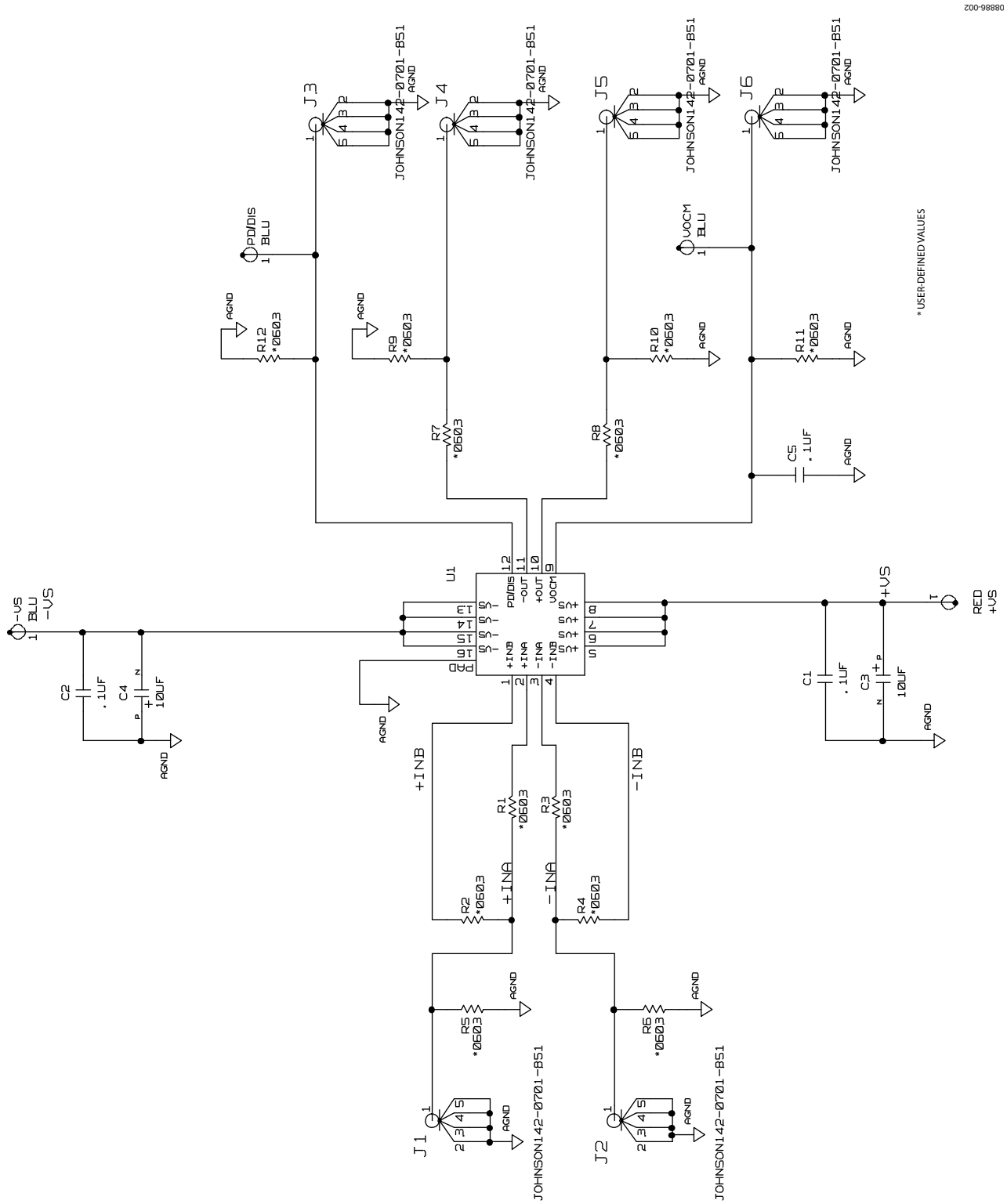

Figure 3. Single Differential Amplifier Universal Evaluation Board Schematic

ASSEMBLY DRAWING AND BOARD LAYOUT

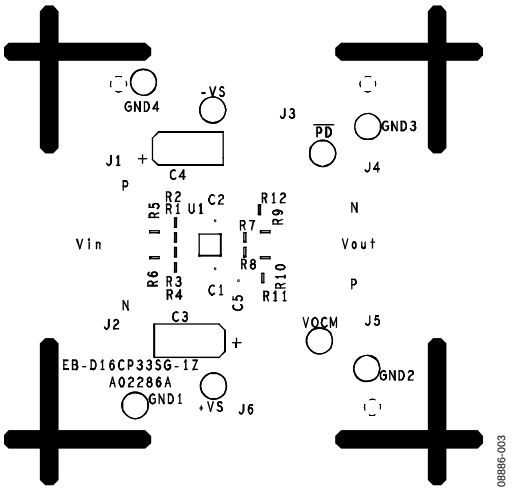

Figure 4. Board Assembly Drawing, Component Side

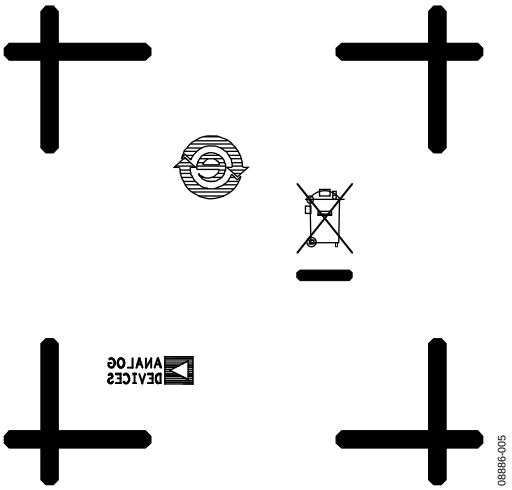

Figure 6. Board Assembly Drawing, Circuit Side

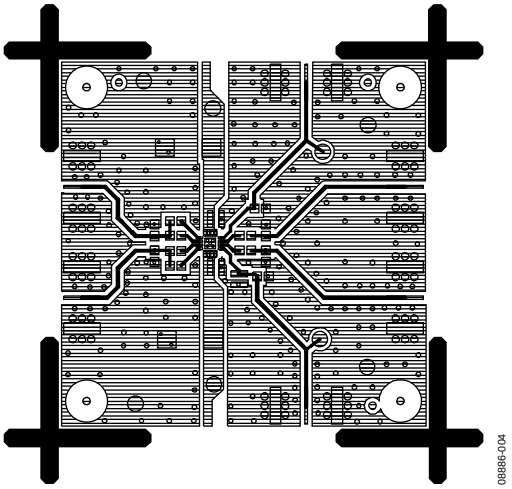

Figure 5. Board Layout Pattern, Component Side

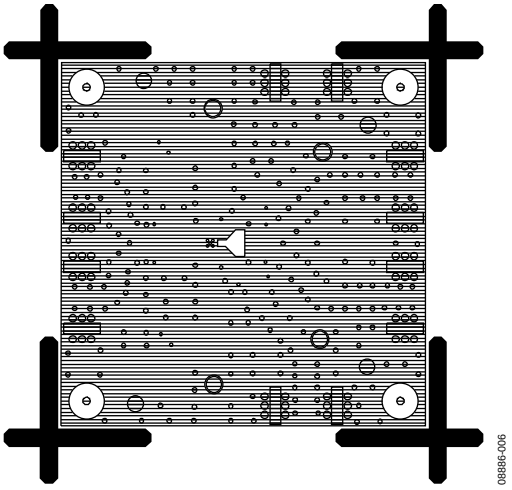

Figure 7. Board Layout Pattern, Circuit Side

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ESD Caution

ESD (electrostatic discharge) sensitive device. Charged devices and circuit boards can discharge without detection. Although this product features patented or proprietary protection circuitry, damage may occur on devices subjected to high energy ESD. Therefore, proper ESD precautions should be taken to avoid performance degradation or loss of functionality.

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